

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP 03/00594

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B26D7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B26D B65H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 548 105 A (KOUTONEN PAULI) 22 October 1985 (1985-10-22) column 1, line 5 - line 14 column 1, line 53 - column 2, line 2; claims 1-12; figures 1,2 abstract	1-10
A	--- US 4 592 259 A (GOERNER BERND ET AL) 3 June 1986 (1986-06-03) column 1, line 53 - column 2, line 25; claims 1-10; figures 1-3 abstract	1-10
A	--- US 6 382 066 B1 (REISINGER FRANZ ET AL) 7 May 2002 (2002-05-07) claims 1,8,14,15; figures 1,2 abstract	1-10
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 December 2003

Date of mailing of the international search report

12.01.04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

FREDRIK ANDERSSON/ELY

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FI 03/00594

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DE 100 23 210 A (WILHELM BILSTEIN KG SPEZIALFAB) 15 November 2001 (2001-11-15) claims 1-7; figures 1-4 abstract</p> <p>-----</p>	1-10

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FI 03/00594

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4548105	A	22-10-1985	FI 830673 A	02-09-1984
			AT 393366 B	10-10-1991
			AT 70984 A	15-03-1991
			CA 1216513 A1	13-01-1987
			DE 3407258 A1	06-09-1984
			FR 2541924 A1	07-09-1984
			GB 2138568 A ,B	24-10-1984
			JP 1965224 C	25-08-1995
			JP 4079797 B	16-12-1992
			JP 59169797 A	25-09-1984
			SE 460875 B	27-11-1989
			SE 8401033 A	02-09-1984
US 4592259	A	03-06-1986	DE 3417042 A1	14-11-1985
			BR 8502172 A	07-01-1986
			CA 1228799 A1	03-11-1987
			EP 0167472 A2	08-01-1986
			ES 8701572 A1	01-03-1987
			FI 851438 A ,B,	10-11-1985
			IN 165373 A1	07-10-1989
			JP 60259398 A	21-12-1985
			KR 8801074 B1	22-06-1988
			PH 22033 A	13-05-1988
US 6382066	B1	07-05-2002	DE 19832871 C1	31-05-2000
			EP 0976509 A2	02-02-2000
DE 10023210	A	15-11-2001	DE 10023210 A1	15-11-2001
			WO 0185408 A2	15-11-2001